

IN THE CLAIMS:

Please cancel Claims 2 to 4 without prejudice or disclaimer of subject matter. Please amend Claims 1 and 5 to 7 as shown below. The claims, as pending in the subject application, read as follows:

1. (Currently Amended) A reconfigurable optoelectronic circuit having an alterable ~~adapted to alter its~~ internal configuration, comprising a plurality of logic blocks ~~of electronic circuit~~ and a sheet-shaped ~~an optical circuit~~ transmission medium interconnecting the logic blocks ~~them~~,

wherein ~~both the internal configuration of~~ each of the logic blocks has an alterable internal configuration including a plurality of logic elements selectively connected via electric wires and switches such that the connection of the logic elements can be switched,

wherein each of the logic elements has an alterable internal configuration,  
and wherein the interconnection ~~optical interconnections~~ of the logic blocks using via the optical transmission medium ~~circuit are~~ is alterable.

2. to 4. (Cancelled)

5. (Currently Amended) A circuit according to claim 1 [[4]], wherein configuration data of the circuit are distributed by way of said optical ~~circuit~~ transmission medium and the alterable internal configuration of any of the logic blocks is altered according to the configuration data.

6. (Currently Amended) A circuit according to claim 1 [[4]], wherein each of said logic blocks comprises a variable logic section and a memory section and the memory section holds configuration data that corresponds to the alterable internal configuration of the variable logic section.

7. (Currently Amended) A circuit according to claim 6, wherein said logic block are adapted to move, copy and/or replace the alterable internal configuration of some other logic block by way of the optical ~~circuit~~ transmission medium.

8. (Withdrawn) A hierarchically reconfigurable circuit, comprising a first stratum having a plurality of logic elements whose internal configurations are alterable, a second stratum containing logic blocks having electric wires and switches arranged in the form of a matrix and interconnecting the arranged logic elements and adapted to switch the interconnections of the logic elements and a third stratum having a sheet-shaped optical transmission medium for optically interconnecting the logic blocks and adapted to switch the interconnections of the logic blocks.

9. (Withdrawn) An interconnection structure, comprising electric wires interconnecting logic elements, electric switches adapted to alter the interconnections of the logic elements, ports connected to the logic elements and adapted to perform opto-electric signal conversions and a means for altering optical interconnections among the ports by way of a sheet-shaped optical transmission medium.